

Remarks

Claims 1-20 were pending. Applicants have canceled claims 3-4 and 8-20 without prejudice to Applicants' right to pursue their subject matter in the present application and in related applications. Applicants have amended the independent claims to recite methods of diagnosing or monitoring colon cancer in a subject; to recite GPR49; and to recite that GPR49 is over-expressed in colon cancer. Support for the amendment is found in the original application at least, for example, at pages 4, 10, 11, and 16. Applicants have also amended claim 5 to alter its claim dependency. Applicants submit that the present amendment introduces no new matter into the application.

Upon entry of the present amendment, claims 1-2 and 5-7 will be pending and presented for consideration.

Information Disclosure Statement

Applicants thank Examiner Yao for considering the art from the Information Disclosure Statements of November 19, 2004, and July 5, 2005. Applicants have now filed a further Information Disclosure Statement, on November 2, 2005, and request that Examiner Yao also return an initialed copy of that Form PTO-1449 to Applicants in due course.

Claim Objections

The Office action objected to claims 1-8 as being drawn to a non-elected invention. Applicants have amended the pending independent claims to recite a "GPR49 polypeptide" (claim 1) or "wherein one of said one or more colon cancer genes is GPR49" (claim 7). Accordingly, Applicants request withdrawal of the objection.

35 U.S.C. § 112

The Office action rejected claims 4-8 under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. Specifically, the Office action alleged that claims 4 and 8 were vague and indefinite because of their reliance on tables within the specification. Without acquiescing to the merits of the rejection, Applicants have canceled claims 4 and 8. Claims 5-7 do not refer to tables within the specification. Accordingly, Applicants request withdrawal of the rejection.

35 U.S.C. § 101

The Office action rejected all pending claims as allegedly directed to non-statutory subject matter. Specifically, the Office action alleged that the claims were directed to abstract ideas and not to a concrete, useful and tangible result.

Applicants have amended the claims to relate to methods of diagnosing or monitoring colon cancer in a subject. Applicants submit that the method produces a concrete, useful and tangible result and is directed to statutory subject matter. Accordingly, Applicants request reconsideration and withdrawal of the rejection.

35 U.S.C. § 102

The Office action rejected all pending claims as allegedly anticipated by U.S. Patent Application Publication No. 2003/0232350 ("Afar"). Applicants traverse this rejection to the extent it is maintained against the amended claims.

As amended, claim 1 relates to a method of diagnosing or monitoring colon cancer in a subject; the method includes detecting a level of a GPR49 polypeptide. As amended, claim 7 relates to a method of diagnosing or monitoring colon cancer in a subject; the method includes detecting an expression profile of one or more colon cancer genes, wherein one of said one or more colon cancer genes is GPR49.

Afar does not teach detecting a level of a GPR49 polypeptide or detecting an expression profile of GPR49 in the context of diagnosing or monitoring colon cancer. Afar teaches that GPR49 expression may be elevated in uterine cancer. Afar identifies hundreds of genes as demonstrating elevated expression in colon cancer, but GPR49 is not among them. Thus, Afar does not teach, or even suggest, the claimed invention, which relates to GPR49 and colon cancer.

Accordingly, Applicants request withdrawal of the rejection.

CONCLUSION

Upon entry of the present amendment, claims 1-2 and 5-7 will be pending and presented for consideration. Applicants believe the claims to be in condition for allowance and request a telephonic interview with the undersigned attorney to address any outstanding issues.

Respectfully submitted,



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